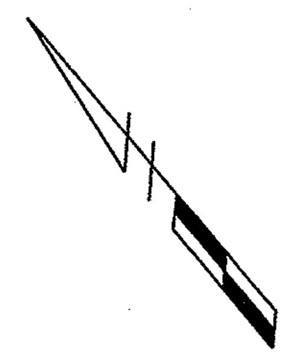
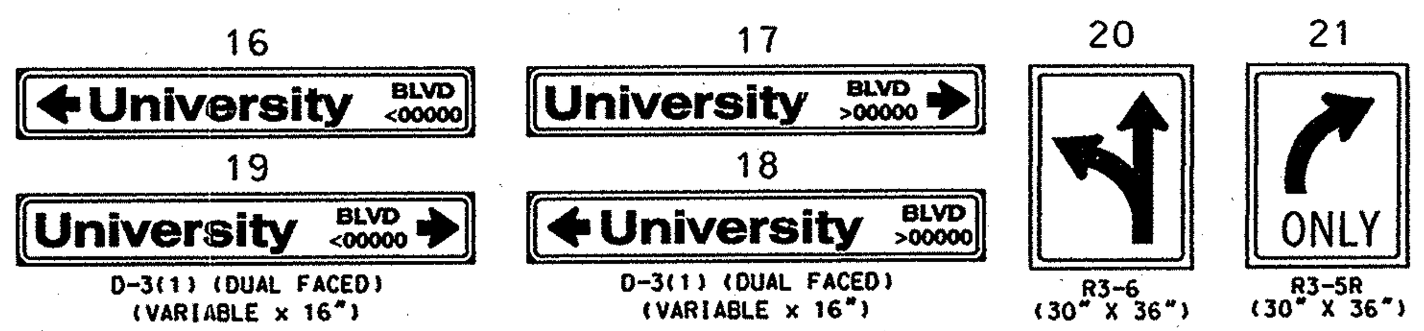


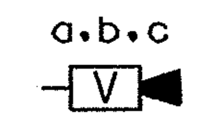
MD 193 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

VIDEO DETECTION ZONE

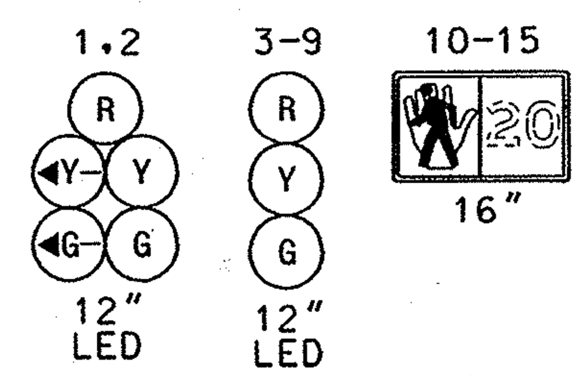
PROPOSED SIGNS



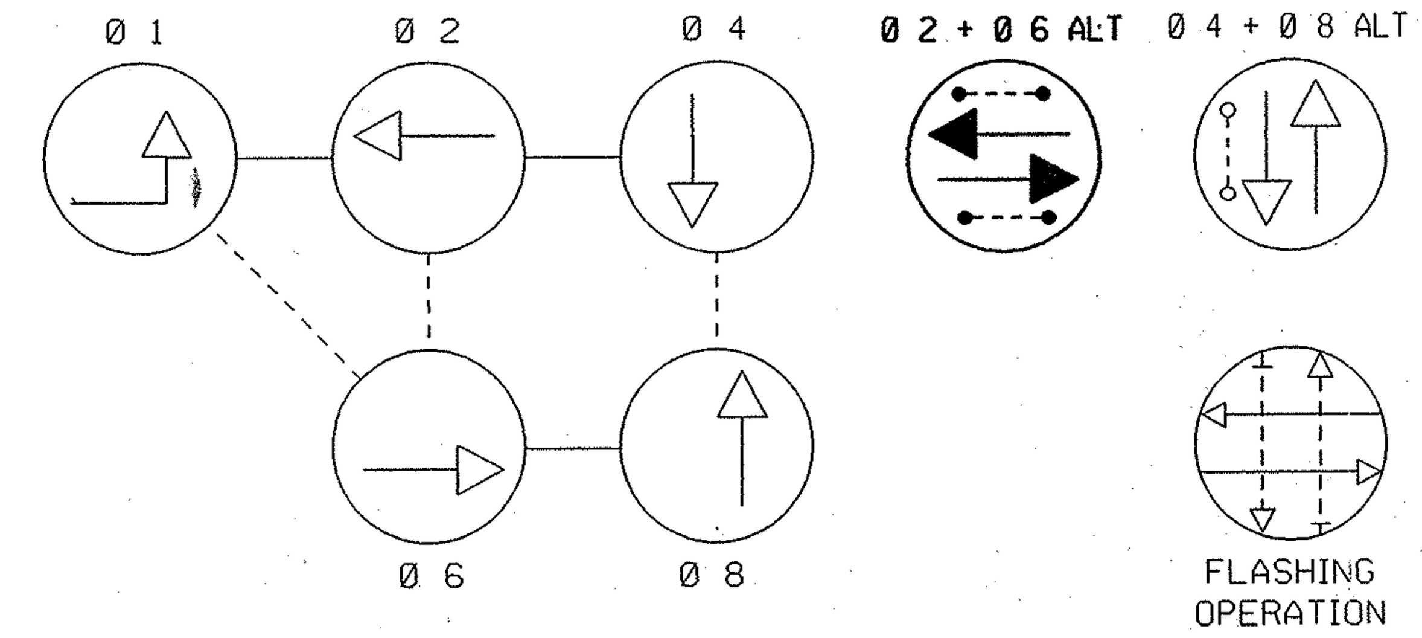
PROPOSED VIDEO DETECTION CAMERA



PROPOSED SIGNAL HEADS



NEMA PHASING



PHASING NOTES:

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SPECIAL NOTE:

1. THE EXISTING TRAFFIC SIGNAL SHALL REMAIN OPERATIONAL WHILE THE PROPOSED TRAFFIC SIGNAL IS BEING CONSTRUCTED. THE CONTRACTOR SHALL RELOCATE EXISTING SIGNAL HEADS DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER.
2. THE TACTILE ARROWS FOR THE AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTONS SHALL BE LOCATED PARALLEL TO THE CROSSWALK FOR WHICH THEY APPLY.

CONSTRUCTION DETAILS

⚠A. INSTALL 16.5 FT. (15'-0" T) STEEL POLE WITH A 50 FT. (CUT TO 45 FT.) MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA MOUNTED ON MAST ARM. ~~COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-4(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS UNIVERSITY BLVD.").~~ (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN POLE BASE).

B. INSTALL 16.5 FT. (15'-0" T) STEEL POLE WITH A 50 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, ELECTRICAL UTILITY SERVICE EQUIPMENT (120/240 V, 60 AMPS), VIDEO DETECTION CAMERA MOUNTED ON MAST ARM, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT AND R10-4(1) SIGN. (SIGN TO READ"PUSH BUTTON TO CROSS UNIVERSITY BLVD."). (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN POLE BASE).

C. INSTALL 16.5 FT. (15'-0" T) STEEL POLE WITH A 50 FT. (CUT TO 42 FT.) MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, COUNTDOWN PEDESTRIAN SIGNAL HEADS, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-4(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS UNIVERSITY BLVD"). (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN POLE BASE).

⚠~~D. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT AND R10-4(1) SIGN. (SIGN TO READ"PUSH BUTTON TO CROSS UNIVERSITY BLVD."). (INSTALL 2-2 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE).~~

E. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT AND R10-4(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS SHOPPING CENTER ENTRANCE"). (INSTALL 2-2 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE).

F. INSTALL NEMA SIZE "6" BASE MOUNTED CABINET AND CONTROLLER. CABINET DOOR SHALL BE ORIENTED TO OPEN TOWARDS MD 193 AND PROPOSED SIDEWALK TO BE USED AS CONCRETE PAD. (INSTALL 2-2 IN. AND 2-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN CABINET BASE.)

G. INSTALL HANDHOLE.

H. INSTALL 2 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).

J. INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).

K. INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SLOTTED).

L. INSTALL 2 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED) FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE.

M. CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE.

N. INSTALL 12 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING (CROSSWALK).

O. INSTALL 24 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING (STOP LINE).

CONSTRUCTION DETAILS

P. REMOVE EXISTING STEEL POLE AND POLE MOUNTED CABINET. REMOVE FOUNDATION 12 IN. BELOW GRADE. SHA FORCES TO REMOVE CONTROLLER AND ALL AUXILIARY EQUIPMENT.

Q. REMOVE EXISTING STEEL POLE. REMOVE FOUNDATION 12 IN. BELOW GRADE.

R. REMOVE EXISTING PEDESTRIAN POLE. REMOVE FOUNDATION 12 IN. BELOW GRADE.

S. REMOVE EXISTING SPAN WIRE.

T. CAP AND ABANDON EXISTING CONDUIT.

U. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-4(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS SHOPPING CENTER ENTRANCE"). (INSTALL 2-2 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE).

V. PROPOSED OVERHEAD ELECTRICAL SERVICE.

W. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE (CUT ABOVE R10-4(1) SIGN) WITH AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT AND R10-4(1) SIGN. (SIGN TO READ"PUSH BUTTON TO CROSS SHOPPING CENTER ENTRANCE"). (INSTALL 2-2 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE).

X. INSTALL 16.5 FT. (15'-0" T) STEEL POLE WITH A 38 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, AND VIDEO DETECTION CAMERA MOUNTED ON MAST ARM. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN POLE BASE).

GENERAL NOTES

1. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCE AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO THE CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
3. THE CONTRACTOR SHALL NOT CUT MAST ARM AS INDICATED ON PLANS UNTIL MAST ARM POLE LOCATION IS FINALIZED.
4. INSTALL CONDUIT PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS. REFER TO SIGNING AND PAVEMENT MARKING PLANS FOR ADDITIONAL DETAILS.
5. VERIFY PROPOSED GEOMETRICS PRIOR TO INSTALLING SIGNAL EQUIPMENT.
6. ALL HANDHOLES SHALL BE INSTALLED AT FINAL GRADE.
7. THE SIGNAL CONTRACTOR SHALL DETERMINE IF ANY WORK BY OTHER CONTRACTORS CAN NOT BE COMPLETED UNTIL INSTALLATION OF SIGNAL EQUIPMENT IS COMPLETE. THE SIGNAL CONTRACTOR SHALL NOTIFY OTHER CONTRACTORS OF THIS WORK.

LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES

AERIAL CABLE	A
ELECTRICAL	E
TELEPHONE	T
GAS	G
SEWER	SS
STORM DRAIN	SD
WATER	W
CABLE TV	TV

WR&A
Whitman, Requardt and Associates, LLP
801 South Caroline Street
Baltimore, Maryland 21231
(410) 235-3450

REVISIONS

⚠ REMOVED PEDESTRIAN CROSSING AND SIGNALS ON MD 650 ADDENDUM NO. 1	8/01/06
SRB | NML | CJW | [signatures]	
Ⓐ REBUILD TRAFFIC SIGNAL CONTRACT NO. M03335184	4/18/06
SRB | NML	

APPROVALS

TEAM LEADER - TRAFFIC ENGINEERING DESIGN DIVISION

ASST. TRAFFIC ENGINEERING DESIGN DIVISION

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, TRAFFIC & SAFETY

ORIGINAL ON FILE

TSP-5

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION

Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION

TRAFFIC SIGNALIZATION PLAN MD 193 & ENT. TO TAKOMA/LANGLEY CROSSROADS/ HAMPSHIRE LANGLEY SHOPPING CENTERS

DRAWN BY: D. DODA	F.A.P. NO.		TS NO. TS-614A	SHEET NO.
CHECKED BY:	S.H.A. NO.	P-731-501-376		
SCALE: 1" = 20'	COUNTY:	PRINCE GEORGES	T.I.M.S. NO.	
DATE: 6-12-72	LOG MILE:			41 OF 69